IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-18 (canceled).

19.   (new) A method for updating primary and secondary log blocks stored in primary and secondary disk subsystems of primary and secondary database processing systems, respectively, in order to be ready for disaster recovery at an occurrence of a failure in the primary database processing system, the method comprising the steps of:

receiving, by the primary disk subsystem, a write command from a primary host computer via a network;

writing, by the primary disk subsystem, data indicated by the write command thus received into a cache of the primary disk subsystem;

determining, by the primary disk subsystem, whether the received write command is a command to write data into the primary log block;

transferring, from the primary disk subsystem, the received write command to the secondary disk subsystem via the network, if the received write command is a command to write data into the primary log block;

tracing, by the primary disk subsystem, log records constituting the primary log block stored in the primary disk subsystem to update data of a primary database in the primary disk subsystem;

reporting, by the primary disk subsystem, completion of write operation of the data indicted by the received write command to the primary host computer via the network;

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receiving, by the secondary disk subsystem, the write command
transferred from the primary disk subsystem via the network;

writing, by the secondary disk subsystem, the data indicated by the
write command thus transferred into a cache of the secondary disk
subsystem;

determining, by the secondary disk subsystem, whether the transferred
write command is a command to write data into the secondary log block; and

tracing, by the secondary disk subsystem, log records constituting the
secondary log block stored in the secondary disk subsystem to update data of
a secondary database in the secondary disk subsystem, when the transferred
write command is a command to write the data into the secondary log block.

20.   (new) The method according to claim 19, further comprising the
steps of:

receiving, by the primary disk subsystem, a read command from the
primary host computer via the network;

determining, by the primary disk subsystem, whether the received read
command is a command to read data of the primary database;

tracing, by the primary disk subsystem, log records constituting the
primary log block stored in the primary disk subsystem to update data of the
primary database in the primary disk subsystem;

reading, by the primary disk subsystem, data indicated by the received
read command from the primary database; and

transmitting, from the primary disk subsystem, the data thus read to the
primary host computer.

21.   (new) The method according to claim 19, wherein the log records include a COMMIT transaction.

22.   (new) The method according to claim 19, wherein data of the primary database are stored in a plurality of primary storage units constituting the primary database, and

wherein data updating of the primary database is performed concurrently on a primary storage unit basis.

23.   (new) A system ready for disaster recovery in which system, at an occurrence of a failure in a primary database processing system, database processing is continuously executed by replacing the primary database processing system with a secondary database processing system,

wherein the primary database processing system comprises:

a primary host computer and a primary disk subsystem having a primary database, and the secondary database processing system comprises:

a secondary host computer and a secondary disk subsystem having a secondary database,

wherein the primary host computer includes a primary database management processing portion that transmits a write command to write data stored in the primary disk subsystem and a read command to read data stored in the primary disk subsystem,

wherein the primary disk subsystem includes:

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a primary disk control processing portion that receives a command from the primary host computer and determines whether the command thus received is a write command or a read command,

a primary data modify processing portion that determines, when the received command is a write command, whether or not data to be written by the received write command is data of a primary log block, converts, when the data to be written by the received write command is data of the primary log block, logical position information of the data indicted in the received write command into physical position information of the data in a corresponding primary storage unit by using a first conversion table which indicates correspondence relationships between logical position information of data used for database processing on a side of the primary host computer and physical position information of the data used for accessing primary storage units on a side of the primary disk subsystem, writes the data indicated by the received write command into the corresponding primary storage unit, and traces log records constituting the primary log block stored in the primary database to update data of the primary database; and

a data transmission processing portion that transfers the received write command to the secondary disk subsystem,

wherein the secondary disk subsystem includes:

a data reception processing portion that receives the write command thus transferred;

a secondary data control processing portion that determines whether the transferred command is a write command or a read command; and

a secondary modify processing portion that determines, when the transferred command is a write command, whether or not data to be written by the transferred write command is data of the secondary log block, converts, when the data to be written by the transferred write command is data of the secondary log block, logical position information of the data indicated in the transferred write command into physical position information of the data in a corresponding secondary storage unit by using a second conversion table which indicates correspondence relationships between logical position information of data used for database processing on a side of the secondary host computer and physical position information of the data used for accessing secondary storage units on a side of the secondary disk subsystem, writes the data indicated by the transferred write command into the corresponding secondary storage unit, and traces log records constituting the secondary log block stored in the secondary database to update data of the secondary database.

24.   (new) The system according to claim 23, wherein, when the received command is a read command, the primary data modify processing portion determines whether the received read command is a command to read data of the primary database data,

wherein the primary data modify processing portion trances log records constituting the primary log block stored in the primary disk subsystem to update data of the primary database in the primary disk subsystem, when the received read command is a command to read the data of the primary database data,

wherein the primary data modify processing portion reads data indicted by the received read command from the primary database; and

wherein the data thus read is transmitted from the primary disk subsystem to the primary host computer.

25.   (new) The system according to claim 23, wherein the log records include a COMMIT transaction.

26.   (new) The system according to claim 23, wherein data updating of the primary database is performed concurrently on a primary storage unit basis.